WHAT IS CLAIMED IS:

1   1.   A method for applying a row from a source table to a destination table, the

2   method comprising:

3   selecting a first column from a source table;

4   selecting a second column from a destination table;

5   performing an outer join operation on the source table and the destination

6   table using the first and second columns;

7   updating each row in the destination table with a row from the results of

8   the outer join operation containing a matching element in the first and second

9   columns; and

10   inserting into the destination table each row from the results of the full

11   outer join operation with a non-matching element in the first and second column.

1   2.   The method of claim 1 further comprising:

2   combining the rows in the source table such that the first column has a

3   unique element in each row.

1   3.   The method of claim 2 wherein the combining step further comprises:

2   sorting the rows in the source table based on the element in the first

3   column; and

4   creating a group of rows, wherein each row in the group of rows contains a

5   matching element in the first column;

6   combining the group of rows into a single row.

1   4.   The method of claim 1 wherein the outer join operation uses an equal comparison

2   operator for a comparison statement.

1   5.   A single query language statement to insert a new row or update an existing row

2   in a database table, the statement implementing a process comprising the steps of:

3   selecting from a source table a first column comprising a plurality of

4   elements;

5   selecting from a destination table a second column comprising a plurality

6   of elements;

7   determining a set of matching rows based upon the success of a

8   comparison operation on an element in the first column and an element in the

9   second column;

10   determining a set of non-matching rows based upon the failure of a

11   comparison operation on the first column element and the second column

12   element;

13   updating the destination table with the set of matching rows; and

14   inserting into the destination table the set of non-matching rows.

1   6.   The method of claim 5 further comprising:

2   combining the rows in the source table, wherein the resulting source table

3   has a unique element in each row of the first column.

1   7.   The method of claim 6 wherein the combining step further comprises:

2   sorting the rows in the source table based on the element in the first

3   column; and

4   creating a group of rows, wherein each row in the group of rows contains a

5   matching element in the first column;

6   combining the group of rows into a single row.

1   8.   The method of claim 5 wherein the comparison operation uses an equal

2   comparison operator.

1   9.   A method for upserting a source table with a destination table in a single query

2   language statement, the method comprising:

3   selecting from a source table a first column comprising a plurality of

4   elements;

5   selecting from a destination table a second column comprising a plurality

6   of elements;

7   updating a row in the destination table with a row from the source table

8   upon the success of a comparison operation on an element in the first column of

9   the row from the source table and an element in the second column of the row

10   from the destination table; and

11   inserting a row from the source table into the destination table upon the

12   failure of a comparison operation on an element in the first column of the row

13   from the source table and an element in the second column of the row from the

14   destination table.

1   10.   The method of claim 9 further comprising:

2   combining the rows in the source table, wherein the resulting source table

3   has a unique element in each row of the first column.

1   11.   The method of claim 10 wherein the combining step further comprises:

2   sorting the rows in the source table based on the element in the first

3   column; and

4   creating a group of rows, wherein each row in the group of rows contains a

5   matching element in the first column;

6   combining the group of rows into a single row.

1   12.   The method of claim 9 wherein the comparison operation uses an equal

2   comparison operator.

1   13.   A computer implemented method for aggregating data in a database, comprising:

2   parsing from a command line, a command, a source table, a destination

3   table, a source key, and a destination key;

4   comparing the source key in each row of the source table with the

5   destination key in each row of the destination table;

6   determining a set of update rows based upon the success of a comparison

7   operation performed on the source key and the destination key;

8   determining a set of insert rows based upon the failure of a comparison

9   operation performed on the source key and the destination key;

10   updating the destination table with the set of update rows; and

11   inserting into the destination table the set of insert rows.

1   14.   The method of claim 13 further comprising:

2   combining the rows in the source table, wherein the resulting source table

3   has a unique source key in each row of the source table.

1   15.   The method of claim 14 wherein the combining step further comprises:

2   sorting the rows in the source table based on the source key; and

3   creating a group of rows, wherein each row in the group of rows contains a

4   matching element in the source key;

5   combining the group of rows into a single row.

1   16.   The method of claim 3 wherein the comparison operation uses an equal

2   comparison operator.